

2004 Guidance Document for TRI Reporting to THWRP

Toxics Release Inventory (TRI) Update Sheet

The Toxics Release Inventory (TRI), which is part of the Emergency Planning and Community Right-to-Know Act (EPCRA), is managed by the Environmental Protection Agency (EPA). It is designed to provide the public with information regarding the amounts of toxic chemicals that facilities in the US either use, manufacture, treat, transport, or release into the environment. As new studies are done, the list of 667 chemicals has changed over the years and facilities are responsible for keeping current on the chemical and threshold changes. Knowing what to report, how to report, and how to calculate specific amounts are key issues that will help a facility comply with EPCRA. This sheet is an update to what chemicals and thresholds have changed recently and some example amounts, which trigger the reporting thresholds.

Persistent Bioaccumulative Toxins (PBT's)

Reporting Rules for all PBT's:

- EPA eliminated the “*de minimis*” exemption for EPCRA Section 313, for all PBT chemicals.
- EPA eliminated the “range reporting” option for releases and other waste management activities for all PBT chemicals.
- The “alternate threshold” of one million pounds and the “Form A” certification statement, are not options for any PBT chemical.
- All PBT chemicals must be reported to an accuracy of 0.1 lb., except Dioxins, which have to be reported with an accuracy of 0.1 gram.

1. Polycyclic Aromatic Compounds (PAC's)

- Effective October 29, 1999 under the PBT Law for Report Year (RY) 2000.
- Reporting threshold is 100 lbs./year.
- 3-Methylchloranthrene and Benzo(j,k)fluorene are new members.
- Sources are coal, fuel oil (#6 and #2), asphalt, and creosote wood treatment.

Activities that trigger the reporting threshold include:

Combusting 1,400,000 gallons of #2 fuel oil

Combusting 5, 000 gallons of #6 fuel oil

Manufacturing 560,000 lbs. of paving asphalt

http://www.epa.gov/tri/guide_docs/2001/pacs2001.pdf (EPA's PAC's Guidance Document)

2. Benzo(g,h,i)perylene

- Effective October 29, 1999 under the PBT Law for RY 2000.
- Reporting threshold is 10 lbs./year.
- Not a member of the PAC category due to its chemical nature.
- Sources are coal, fuel oil (#6 and #2), asphalt, and creosote wood treatment.

Activities that trigger the reporting threshold include:

Combusting 28,000, 000/gallons of #2 fuel oil

Combusting 48,000 gallons of #6 fuel oil

Manufacturing 8,300,000 lbs. of paving asphalt

http://www.epa.gov/tri/guide_docs/2001/pest2001.pdf (EPA's PBT Guidance Document)

3. Dioxin and Dioxin-like Compounds

- Effective October 29, 1999 under the PBT Law for RY 2000.
- Reporting threshold is 0.1 grams/year.
- Sources are primarily organic combustion processes that involve the presence of chlorine.

Activities that trigger the reporting threshold include:

Combusting 250 tons of solid waste

Combusting 67,888 tons of wood

Producing 250 million gallons of bleached chemical pulp

Combusting 1,200,000 gallons of #6 fuel oil

http://www.epa.gov/tri/guide_docs/2000/TRIdioxinguidance.pdf (Dioxin Guidance Document)

4. Mercury and Mercury Compounds

- Effective October 29, 1999 under the PBT Law for RY 2000.
- Reporting threshold dropped to 10 lbs./yr.
- Sources are primarily fuel combustion, coal and metal mining, fabricated metal products, and manufacturing bulbs, switches, thermometers and batteries.

Activities that trigger the reporting threshold include:

Combusting 5,800 tons of solid waste

Processing 500,000 lbs. of cement and clay products

Processing 33,000 tons of carbon black

http://www.epa.gov/tri/guide_docs/2001/hg2001.pdf (Mercury Guidance Document)

5. Lead and Lead Compounds

- Effective January 17, 2001 the first TRI Reports for Lead and Lead Compounds for the calendar year 2001 are due by July 1, 2002.
- Reporting threshold dropped from 25,000 and 10,000 lbs./year to 100 lbs./year for all Lead Compounds and all alloys, except bronze, brass and stainless steel.
- The Reporting threshold for lead contained in bronze, brass, and stainless steel remains 25,000 and 10,000 lbs./year.
- The EPA now considers lead and Lead Compounds PBT's.
- Check EPA's "Lead and Lead Compound Guidance Document" for a full list of facilities and processes that will need to report, due to the drop in the threshold amount.

http://www.epa.gov/tri/guide_docs/2001/pb_final_guide.pdf (EPA's Lead Guidance Document)

<http://www.epa.gov/ttnchie1/le/index.html> (Part 1, 2 and 3)

6. Tetrabromobisphenol A (TBBPA)

- Effective October 29, 1999 under the PBT Law for the RY 2000.
- Reporting threshold is 100 lbs./year.
- Sources include flame retardant used in plastics and engineering resins for printed circuit boards and computer equipment. Also used in manufacturing polymers such as polyesters and polystyrenes.
- Affects facilities that manufacture or process TBBPA's, such as plastic processors and circuit board and computer housing manufacturers.

7. Pentachlorobenzene

- Effective October 29, 1999 under the PBT Law for the RY 2000.
- Reporting threshold is 10 lbs./year.
- Sources include any high temperature process involving chlorine, such as waste incinerators and cement kilns.
- Usually found where hexachlorobenzene is found.

See below for Emission Factors

Emissions Factors	
PAC	
No. 2 Fuel Oil	0.0000165 lbs./1000 gallons oil
No. 6 Fuel Oil	0.0000165 lbs./1000 gallons oil
Paving Asphalt	N/A
Benzoperylene	
No. 2 Fuel Oil	N/A
No. 6 Fuel Oil	0.00000226 lbs./1000 gallons oil
Paving Asphalt	N/A
Mercury	
Solid Waste	0.0017 lbs./ton
Cement Mixing	0.01 lbs./ton
Carbon Black	0.0003 lbs./ton
Dioxin	
Oil	1.2 x 10 ⁻⁹ grams/gallon
Lead	
No. 6 Fuel Oil	0.00151 lbs./ 1000 gallons oil
Wood	0.0029 lbs./ tons wood

The EPA has comprehensive Guidance Documents on PAC's, Lead and Lead Compounds, Mercury, Dioxin and Dioxin-like Compounds and other PBT's which can be found at:

www.epa.gov/tri.

For more information:

EPCRA Hotline 1-800-424-9346

Dwight Peavey

US EPA Region 1 TRI Coordinator

E-mail: peavey.dwight@epa.gov

Prepared by Maine DEP's Toxics Program for the purposes of assisting Maine businesses and the public.